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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,508	12/27/1999	KEIJO PALVIINEN	PM265414	2423

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PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER

DAVIS, TEMICA M

ART UNIT	PAPER NUMBER
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2681

22

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/446,508

Applicant(s)
Palvianen

Examiner
Temica M. Davis

Art Unit
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 26, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect Valko, U.S. Patent No. 6,579,248, are persuasive. A new rejection with respect to claims 1-22 is set forth below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-14, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joong et al (Joong), U.S. Patent No. 6,134,433 in view of Le Strat et al (Le Strat), U.S. Patent No. 6,134,220.

Regarding claim 1, Joong discloses a method for implementing call forwarding in a mobile system comprising at least one forwarding exchange for carrying out call forwarding via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one subscriber database for storing the subscriber data related to the call forwarding, the method comprising the

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steps of receiving at the forwarding exchange a call set-up message addressed to a subscriber in the mobile system [col. 5: lines 36-47], performing a subscriber data request to the subscriber database [col. 5: lines 40-45], transmitting a response message from the subscriber database to the forwarding exchange, the message comprising data indicating the call forwarding, a forwarding number [col. 5: lines 45-56], and a basic service code [col. 6: lines 28-33], and implementing call routing to the forwarding number by selecting one of said alternative lines based on the basic service code [col. 6: lines 21-43, col. 8, lines 48-59].

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

In a similar field of endeavor, Le Strat discloses a cellular system that handles voice calls and data calls (col. 2, lines 18-26, col. 9, lines 50-53). Le Strat further discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 22, the combination of Joong and Le Strat discloses the method according to claim 1, wherein selecting of the alternative types of lines include at least one of line quality, line capacity and line cost (Le Strat, col. 4, lines 41-50).

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Regarding claim 2, Joong discloses a method for implementing call forwarding in a mobile system comprising at least a first exchange for carrying out call forwarding via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one home location register connected to the first exchange for storing the subscriber data related to the call forwarding, the method comprising receiving at the first exchange a call set-up message addressed to a subscriber in the mobile system, requesting routing information from the home location register to the first exchange, the message comprising data indicating the call forwarding, a forwarding number, and a basic service code indicating the basic service related to the call, and implementing call routing to the forwarding number by selecting one of said alternative types of lines based on the basic service code [col. 5: line 36 - col. 6: line 43, col. 8, lines 48-59].

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

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Regarding claim 3, the combination of Joong and Le Strat discloses the method of claim 2, wherein the basic service code is forwarded from the home location register to the first exchange via an extension added to the response message Send_Routing_Info_RES to the routing information request (Joong, col. 6: lines 44-65).

Regarding claim 4, Joong discloses a method for implementing call forwarding in a mobile system comprising at least one exchange for carrying out call forwarding via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one visitor location register for storing the subscriber data related to the call forwarding, the method comprising receiving at the exchange a call set-up message addressed to a subscriber in the mobile system, providing a subscriber data request to the visitor location register connected to the exchange, transmitting a response message from the visitor location register to the exchange, the message comprising data indicating the call forwarding, a forwarding number and a basic service code and implementing call routing to the forwarding number according to the basic service code (col. 5: line 36 - col. 6: line 65).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

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Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 5, Joong discloses a home location register connected to a first exchange in a mobile system, wherein the home location register is arranged to transmit a basic service code to the first exchange in connection with a response message to a routing information request, the basic service code indicating the necessary properties of the line which should be selected from several types of lines in routing the call (col. 6: lines 10-43, col. 8, lines 48-59).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 21, the combination of Joong and Le Strat discloses an HLR according to claim 5, wherein the necessary properties include at least one of line quality, line capacity and line cost (Le Strat, col. 4, lines 41-50).

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Regarding claim 6, the combination of Joong and Le Strat discloses wherein the home location register is arranged to forward the basic service code to the first exchange by means of an extension added to the response message Send_Routing_Info_RES to the routing information request (Joong, col. 6: lines 44-65).

Regarding claim 7, Joong discloses a first exchange in a mobile system, comprising means for transferring a call to a forwarding number via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59), wherein the exchange is arranged to derive a basic service code from the call set-up message or from a response message transmitted by the home location register to the first exchange in response to a subscriber data request, and the exchange is arranged to route the call to the forwarding number by selecting one of said alternative types of lines based on the basic service code (col. 5: line 36 - col. 6: line 65, col. 8, lines 48-59).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

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Regarding claim 8, the combination of Joong and Le Strat discloses the exchange of claim 7, wherein the exchange is arranged to receive the basic service code in an extension added to the response message Send_Routing_Info_RES to the routing information request (Joong, col. 6: lines 44-65).

Regarding claim 9, the combination of Joong and Le Strat discloses the exchange according to claim 7, wherein the forwarding number is the number of a Voice Mail Service center having several lines, and that said exchange is arranged to transfer the call to the Voice Mail Service center via a line selected for the transfer according to the basic service code (Joong, col. 4: lines 30-44).

Regarding claim 10, the combination of Joong and Le Strat discloses the exchange according to claim 7, wherein the exchange is arranged to subject the forwarding number to a conversion selected according to the basic service code (Joong, col. 6: lines 21-43).

Regarding claim 11, Joong discloses an exchange in a mobile system, comprising means for transferring a call to a forwarding number via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59), wherein the exchange is arranged to derive a basic service code from basic service data that indicates the basic service of the call and that is transmitted in connection with the call set-up message or a response message transmitted from the visitor location register to the exchange in response to a subscriber data request, and the exchange is arranged to perform routing to the forwarding number by selecting one of said

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alternative types of lines based on the basic service code (col. 5: line 36 - col. 6: line 65, col. 8, lines 48-59).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 12, the combination of Joong and Le Strat discloses the exchange according to claim 11, wherein the exchange is arranged to derive the basic service code at least on the basis of the bearer capability information element contained in the basic service data (Joong, col. 6: line 21 -28).

Regarding claim 13, the combination of Joong and Le Strat discloses the exchange according to claim 11, wherein the forwarding number is the number of a Voice Mail Service center having several lines, and that the exchange is arranged to transfer the call to the Voice Mail Service center via a line selected for the transfer according to the basic service code (Joong, col. 4: lines 30-44).

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Regarding claim 14, the combination of Joong and Le Strat discloses exchange according to claim 11, wherein the exchange is arranged to subject the forwarding number to a conversion selected according to the basis service code (Joong, col. 6: lines 21-43).

4. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joong, Le Strat and Seraj, U.S. Patent No. 5,388,095.

Regarding claims 15-20, the combination of Joong and Le Strat discloses the limitations of claims 1, 2, 4, 5, 7 and 11 as described above and further discloses wherein the basic service/code includes different call types for the subscriber (Joong, i.e. analog/digital speech and data lines, see col. 8, lines 48-59).

The combination, however, fails to specifically disclose wherein the different types of calls have a single called party number.

In a similar field of endeavor, Seraj discloses representation of subscribers in a multiple interface environment. Seraj further discloses wherein different interfaces belonging to one subscriber have a single called party number (col. 2, lines 20-51).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Joong and Le Strat with the teachings of Seraj since such a feature (single called party number) would limit the amount of telephone numbers one would have to remember when needing to contact someone having multiple communication devices.

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday from 7:00 am to 3:30 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Sinh Tran, can be reached on (703) 305-4040.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 customer service whose telephone number is (703)306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for any communications intended for entry).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TMD

November 13, 2003


**TEMICA M. DAVIS
PATENT EXAMINER**